

Amendments to the Specification:

Page 16, paragraph 64, is amended as follows:

[0064] This embodiment of the invention also takes into account a further factor which can lead to inaccuracy in the aberration measurement. Referring to Figure 8, the mask MA provides a regular array of outer frames in a measurement area 20 which is imaged at the substrate W. However, the pinhole 18 through which the radiation passes is defocused and this means that the image of the pinhole 18 will suffer from ~~sever~~severe spherical aberration. As shown in Figure 8, light subtending different angles at the pinhole 18 is focused at different distances from the plane of the substrate W. The occurrence of this effect is fundamental, even in the presence of perfect imaging optics. The consequence of this effect is that regularly arrayed outer frames at the mask 20 are no longer regularly arrayed at the substrate W. This effect causes extra shifts between inner and outer frame pairs across the test pattern images (Figure 4).